COCKPIT RESOURCE MANAGEMENT TRAINING*

Lawson C. White Director, Flight Operations Services International Air Transport Association

1. The 6th General Flight Crew Training Meeting held in Montreal in May, 1984 was for most IATA member airlines the first time they had been exposed to what was then a relatively new aspect of flight crew training--resource management training. Present at that meeting were 164 representatives of 70 different airlines. The report of the meeting stated in part:

"A number of factors bearing on pilot acceptance of the training were discussed. Some airlines had considered national or ethnic characteristics in designing their programs. Some had found a greater level of acceptance and enthusiasm among their younger pilots, but in that connection opportunities for role reversal, both in the aircraft and in LOFT exercises, had often proved a more significant factor. Other airlines confirmed the overall results given in the United Airlines' presentation.

"There was no apparent consensus on whether resource management training should be offered as a stand-alone program or as an integrated part of a total aircraft training package. Both options had been employed successfully. In each case, however, there was agreement on the need for recurrent training, and for giving trainees a sound conceptual framework for the skills they were expected to practice. Integration of the training into the total aircraft package appeared to most directly address earlier concerns regarding its possible requirement by regulatory authorities, and also possible management insistence on cost effectiveness justification for "new" programs.

"From floor indications relatively few of the airlines represented had so far implemented resource management training programs. It was hoped that this agenda item had both stimulated others to do so, and had provided some useful guidelines."

2. In reviewing the results of this meeting the IATA Flight Crew Training Sub-Committee (FCTSC), which had been responsible for the agenda and the meeting itself, concluded that because very few airlines had implemented a program or even appeared to understand the term "resource management", a member airline survey should be conducted and the results analyzed. This presentation shows the results of that survey in a form which can be related to the topics of this workshop.

^{*}The views presented are those of the author and may not represent the views of IATA.

- 3. Twenty-four airlines or 17% of the membership of 140 airlines responded to the survey which was completed in December, 1985 and presented to the IATA FCTSC in April, 1986.
- 4. Geographically, the twenty-four airlines came from the following areas:

Europe 8 Airlines
Americas 7 Airlines
Far East 6 Airlines
Middle East 2 Airlines
Africa 1 Airline

- 5. The survey consisted of 8 questions. The first of these asked whether or not a RMT course had been implemented or was one planned.
 - 14 airlines confirmed a course had been implemented.
 - 6 airlines planned to introduce the training.
 - 4 airlines had no plans, 3 were investigating the possibility.
- 6. The next two questions, which can be related to Topic 1 of this workshop asked for a definition of the the program and its goals and requested the syllabus. A typical response to the definition request was "to reinforce the qualities of effective and efficient leadership". Leadership was mentioned in 9 of the responses to this question.
- 7. With regard to the syllabus the responses were indeed varied with 20 different responses. A typical content would be*:
 - Information Processing
 - Decision-Making (9)
 - Human Factors
 - Automation
 - Pilot Error
 - Safety Record
 - Leadership (6)
 - Industrial Management
 - Command
 - Crew Cooperation (6)
 - Communication (10)
 - LOFT

^{*}The numerals in parentheses indicate the number mentioning this subject.

- 8. With respect to Topic 2 of the workshop the IATA survey asked two related questions: "To whom was the RMT course given?" and "In what manner?"
- 9. Four airlines gave the course to captains only and 7 airlines to all flight crew members including management pilots. The other responses varied.
- 10. The method(s) reported used in the courses were as follows:

-	LOFT	2
-	seminar/workshop	5
-	lecture	8
-	home study	2
-	audio visuals	1
_	flight simulator	4

- 11. The next two questions asked in the IATA survey were "How long was the course?", and "How often was RMT training given?" These questions relate to Topic 3 of the workshop.
- 12. Of the airlines responding, the longest course was 16 days and the shortest 3 hours. With regard to the frequency of training this varied from once only to 3-5 days each year.
- 13. The final question we asked was for the airline to quantify the results of their program and this question relates to Topic 4 of the workshop. The answers again varied and this of course was not unexpected. Examples were:
 - impossible to postulate
 - too early to evaluate
 - better safety record
 - most satisfactory
- 14. In summary I feel the survey has revealed the diversity of opinion that was prevalent at the time the survey was conducted. The reason for this may well be that cockpit resource management needs to be tailored to the person, the airline, and the type of operation conducted. Certainly, based on these result, I am convinced it is not time for regulations requiring CRM training. More than one good concept has been ruined by the regulators acting in haste. It is my hope that this NASA/MAC Workshop will help us reach a conclusion as to an optimum way to train for safety through resource management training.